

# United States Patent and Trademark Office

m

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,849	12/29/2000	Peter Graham Craven	DOL06504-US	6732
7590 07/25/2007 Gallagher & Lathrop			EXAMINER	
Suite 1111 601 California Street San Francisco, CA 94108-2805			TIV, BACKHEAN	
			ART UNIT	PAPER NUMBER
			2151	
			MAIL DATE	DELIVERY MODE
	•		07/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	09/720,849	CRAVEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Backhean Tiv	2151			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>RCE 4/30/07</u> .					
,	, <del></del>				
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>3,4,16-21,25,29,31-33 and 45-49</u> is/are pending in the application.					
4a) Of the above claim(s) 1-2,5-15,22-24,26-28,30,34-44,50 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>3,4,16-21,25,29,31-33 and 45-49</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers					
9) The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).			
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Art Unit: 2151

è

#### **Detailed Action**

Claims 3,4,16-21,25,29,31-33,45-49 are pending in this application. Claims 1-2,5-15,22-24,26-28,30,34-44,50 have been cancelled. This is a response to the RCE filed on 4/30/07.

#### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 3,4,16-21 are rejected under 35 U.S.C. 101 because these claims are nonstatutory. MPEP 2106 states that, "The claimed invention as a whole must >be useful and< accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at \*>1373-74<, 47 USPQ2d at 1601-02". As per claims 3,4,16-21, recites limitations that are abstract ideas, therefore is not tangible.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3,4,16-21,25,29,31-33,45-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to

Art Unit: 2151

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 3,4,16-21,25,29,31-33, recites "manipulating timing boundaries between packets in a model of a repacketised stream", the applicant has described "manipulating the timing boundaries between packets" on page 17, line 22-24, however is silent on "a model of a repacketised stream".

As per claims 45-49, recites, "a repacketiser responsive to the control data that manipulates timing boundaries between packets in the stream of packets", the applicant has described "manipulates the timing boundaries between packets in the stream of packets", on page 17, line 22-24, however is silent on "a repacketiser responsive to the control data".

As per claims 45-49, recites, "a decoder having an input coupled to the output of the FIFO buffer that decodes the packets with manipulated timing boundaries", the applicant has described "manipulating the timing boundaries between packets" on page 17, line 22-24, however is silent on the decoder decoding the packets with the manipulated timing boundaries.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2151

Claims 25,29,31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25,29,31-33 recites the limitation "the minimum data". There is insufficient antecedent basis for this limitation in the claim.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3,4,16-18,21, 25,29,31,32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naimpally in view of US Patent 6,026,232 issued to Yogeshwar et al.(Yogeshwar) in further view of US 5,377,051 issued to Lane et al.(Lane).

As per claim 3, 25, Naimpally teaches an encoder for producing an encoded packetised variable rate stream (Abstract), including comprising:

means for determining data rate to which the packetised stream could be decoded having given first-in-first-out (FIFO) buffer size (col.5, lines 42-62); and

Naimpally however does not explicitly teach means for manipulating timing boundaries between packets in a model of a stream to determine determining a

Art Unit: 2151

minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum and buffer size without buffer overfill.

Yogeshwar teaches means for manipulating timing boundaries between packets in a model of a stream to determine determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum(col.25, lines 45-col.26, lines 39) and buffer size without buffer overfill(col.22, lines 25-40).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally to determining a minimum data rate and introducing control data into the encoded variable rate stream, the control data representing the minimum as taught by Yogeshwar in order to encode/decode data.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teaching of Naimpally and Yogeshwar in order to provide a process of encoding/decoding data at different data rates (Yogeshwar, col.25, lines 45-col.26, lines 39).

Naimaplly in view of Yogeshwar does not explicitly teach repacketised data.

Lane explicitly teaches repacketised data (col.50, lines 41-48).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally in view of Yogeshwar to explicitly teach repacketised data as taught by Lane in order for a decoder to recognize a stream of data packets (Lane, col.50, lines 41-48).

Art Unit: 2151

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Naimpally, Yogeshwar, and Lane to provide a system to recognize a stream of data packets (Lane, col.50, lines 41-48).

As per claim 4, 29 wherein the encoded stream is losslessly compressed digital audio data (Naimpally, col.1, lines 35-67).

As per claim 16, A mastering system comprising the encoder as claimed in claim 3 (Naimpally, Fig.1-3).

As per claim 17, a system comprising a mastering system as claimed in claim 16, and means for repacketising the data to form, a stream having a peak data rate calculated in dependence upon the control data (Yogeshwar, Figs.14-16B, col.25, lines 45-col.26, lines 39). Motivation to combine set forth in claim 3.

As per claim 18, a system as claimed in claim 17, wherein the stream having a peak data rate corresponding to the control data comprises a fixed rate stream (Yogeshwar, Figs.14-16B, col.25, lines 45-col.26, lines 39). Motivation to combine set forth in claim 3.

As per claim 21, a system as claimed hi any one of claims 17 to 20, wherein the encoder comprises an MLP lossless encoder for audio data (Naimpally, col.3, lines 31-60).

As per claim 31, the data processing method of claim 25, further comprising processing the control data to determine an adequate bandwidth for transmission of the encoded variable rate stream, and transmitting the encoded variable rate stream over

Art Unit: 2151

an interface having at least the adequate bandwidth (Yogeshwar, Figs.14-16B, col.25, lines 45-col.26, lines 39). Motivation to combine set forth in claim 3.

As per claim 32, the data processing method of claim 31 wherein the interface operates at a fixed data rate (Yogeshwar, Figs.14-16B, col.25, lines 45-col.26, lines 39). Motivation to combine set forth in claim 3.

Claims 19,20,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naimpally in view of US Patent 6,026,232 issued to Yogeshwar et al.(Yogeshwar) in further view of US 5,377,051 issued to Lane et al.(Lane) in further view of US Patent 6,009,229 issued to Kawamura.

Naimpally in view of Yogeshwar in further view of Lane teaches all the limitations of claim 3,25, however, does not explicitly teach as per claim 19, 20, 33 a system for providing encoded data to a DVD comprising a mastering system and means for writing the control data onto the disc with the encoded data and a mastering system and an authoring system, the authoring system including an encoder.

Kawamura teaches a system for providing encoded data to a DVD comprising a mastering system as claimed in claim 16, and means for writing the control data onto the disc with the encoded data and a mastering system and an authoring system, the authoring system including an encoder (Figs. 1-22,col.1, lines 14-col.2, lines 23).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teaching of Naimpally in view of Yogeshwar in further view of

Art Unit: 2151

Lane to use a DVD to encode data as taught by Kawamura in order to store more data than that of other media.

One ordinary skill in the art would have been motivated to combine the teachings of Naimpally, Yogeshwar, Lane, and Kawamura in order to provide a process to encode MPEG files on a DVD.

Claims 45-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,619,337 issued to Naimpally in view of US Patent 6,026,232 issued to Yogeshwar et al. (Yogeshwar) in further view of US 5,377,051 issued to Lane et al.(Lane) in further view of US Patent 5,675,383 issued to Yagasaki et al.(Yagasaki).

As per claim 45, Naimpally teaches a system for decoding variable rate data organized as a stream of packets each packet including a corresponding decoder time stamp (Abstract), the device comprising: a FIFO buffer having an input coupled to the buffer for receiving the stored data, and having an output (Abstract, col.1, lines 21-34); and a decoder having an input coupled to the output of the FIFO buffer (Abstract, col.1, lines 21-34).

Naimpally however does not explicitly manipulating timing boundaries between packets in the stream of packets and minimum data rate to packetise data; decoding packets with manipulated timing boundaries; control data that manipulates timing boundaries between packets in the stream of packets and buffer size without buffer overfill.

Art Unit: 2151

Yogeshwar teaches manipulating timing boundaries between packets in the stream of packets and minimum data rate to packetise data, and decoding packets with manipulated timing boundaries(col.25, lines 45-59); control data that manipulates timing boundaries between packets in the stream of packets(col.26, lines 24-39) and buffer size without buffer overfill(col.22, lines 25-40).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally to manipulate timing boundaries between packets and to decode using the timing boundaries as taught by Yogeshwar in order to encode/decode data without errors(Yogeshwar, col.2, lines 1-13).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teaching of Naimpally and Yogeshwar in order to provide a process of encoding/decoding data at different data rates and without errors (Yogeshwar, col.2, lines 1-13, col.25, lines 45-65).

Naimaplly in view of Yogeshwar does not explicitly teach repacketised data.

Lane explicitly teaches repacketised data (col.50, lines 41-48).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally in view of Yogeshwar to explicitly teach repacketised data as taught by Lane in order for a decoder to recognize a stream of data packets (Lane, col.50, lines 41-48).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Naimpally, Yogeshwar, and Lane to provide a system to recognize a stream of data packets (Lane, col.50, lines 41-48).

Art Unit: 2151

Naimpally in view of Huang in further view of Lane does not explicitly teach a feed buffer.

Yagasaki explicitly teach a feed buffer (Fig.1, element 2).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Naimpally in view of Huang in further view of Lane to explicitly teach a feed buffer as taught by Yagaski in order to operate as FIFO memory (Yagasaki, col.2, lines 15-18).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Naimpally, Yogeshwar, Lane, and Yagasaki in order to provide a system capable of implementing a FIFO memory (Yagasaki, col.2, lines 15-18).

As per claim 46, the system of claim 45, wherein the feed buffer stores the stream until the corresponding decoder time stamp for each packet is identified (Naimpally, Abstract).

As per claim 47, wherein the encoded stream is losslessly compressed digital audio data (Naimpally, col.1, lines 35-67).

As per claim 48, wherein the encoder comprises an MLP lossless encoder for audio data (Naimpally, col.3, lines 31-60).

As per claim 49, the system of claim 45, wherein the decoder is an MLP decoder (Naimpally, Abstract).

Art Unit: 2151

## Response to Arguments

Applicant's arguments with respect to claims 3,4,16-21,25,29,31-33,45-49 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571) 272-5654. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Wallace can be reached on (571) 272-3440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Page 12

Application/Control Number: 09/720,849

Art Unit: 2151

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Backhean Tiv

2151 7/20/07 Vafenai Marti Willer SPE ART UNIT 2151